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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Proceeding	92046185
Party	Defendant Pro Football, Inc.
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Signature	/Robert L. Raskopf/
Date	05/24/2012
Attachments	Appendix part 35_Jacoby Exs. 4-7.pdf (33 pages)(2879949 bytes)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

In re Registration No. 1,606,810 (REDSKINETTES)
Registered July 17, 1990,

Registration No. 1,085,092 (REDSKINS)
Registered February 7, 1978,

Registration No. 987,127 (THE REDSKINS & DESIGN)
Registered June 25, 1974,

Registration No. 986,668 (WASHINGTON REDSKINS & DESIGN)
Registered June 18, 1974,

Registration No. 978,824 (WASHINGTON REDSKINS)
Registered February 12, 1974,

and Registration No. 836,122 (THE REDSKINS—STYLIZED LETTERS)
Registered September 26, 1967

Amanda Blackhorse, Marcus Briggs, Phillip Gover, Jillian Papan, and Courtney Tsotigh,	)	Cancellation No. 92/046,185
Petitioners,	)	
v.	)	
Pro-Football, Inc.,	)	
Registrant.	)	

EXHIBITS 4 – 7 TO DEPOSITION TRANSCRIPT OF JACOB JACOBY

PART 35

Respectfully Submitted,

/s/ Robert L. Raskopf
Robert L. Raskopf
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Federal Register

Thursday
February 16, 1995

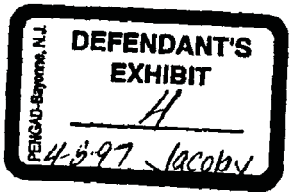
Part IV

Department of the Interior

Bureau of Indian Affairs

Indian Entities Recognized and Eligible To Receive Services From the United States Bureau of Indian Affairs; List; Notice

Jena Band of Choctaw
-Acknowledged 8/29/95



DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Indian Entities Recognized and Eligible To Receive Services From The United States Bureau of Indian Affairs

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice.

SUMMARY: Notice is hereby given of the current list of tribal entities recognized and eligible for funding and services from the Bureau of Indian Affairs by virtue of their status as Indian tribes. This notice is published pursuant to Section 104 of the Act of November 2, 1994 (Pub. L. 103–454; 108 Stat. 4791, 4792).

FOR FURTHER INFORMATION CONTACT: Patricia Simmons, Bureau of Indian Affairs, Division of Tribal Government Services, 1849 C Street N. W., Washington, DC 20240. Telephone number: (202) 208–7445.

SUPPLEMENTARY INFORMATION: This notice is published in exercise of authority delegated to the Assistant Secretary—Indian Affairs under 25 U.S.C. 2 and 9 and 209 DM 8.

Published below are lists of federally acknowledged tribes in the contiguous 48 states and in Alaska. The list is updated from the last such list published October 21, 1993 (58 FR 54364) to include tribes acknowledged through the Federal acknowledgment process and legislation. We have continued the practice of listing the Alaska Native entities separately solely for the purpose of facilitating identification of them and reference to them given the large number of unusual and complex Native names.

In October 1993, the Department published its most recent list in an effort to bring the list up to date as required by 25 CFR Part 83 and in an effort to clarify the legal status of Alaska Native villages. As described in the preamble to the October 1993 list, the first list of acknowledged tribes was published in 1979. 44 FR 7235 (Feb. 6, 1979). The list used the term "entities" in the preamble and elsewhere to refer to and include all the various anthropological organizations, such as bands, pueblos and villages, acknowledged by the Federal Government to constitute tribes with a government-to-government relationship with the United States. A footnote defined "entities" to include "Indian tribes, bands, villages, groups and pueblos as well as Eskimos and Aleuts." 44 FR 7235 n.1. The 1979 list did not, however, contain the names of any Alaska Native entities. The preamble stated that: "[t]he list of eligible Alaskan entities will be published at a later date." 44 FR 7235.

Under the Department's acknowledgement regulations, publication of the list serves at least two functions. First, it gives notice as to which entities the Department of the Interior deals with as "Indian tribes" pursuant to Congress's general delegation of authority to the Secretary of the Interior to manage all public business relating to Indians under 43 U.S.C. 1457. Second, it identifies those entities which are considered "Indian tribes" as a matter of law by virtue of past practices and which, therefore, need not petition the Secretary for a determination that they now exist as Indian tribes. See 25 CFR 83.3 (a), (b) and 83.6(a) (1993 ed.); 25 CFR 83.3(a), (b) (1994 ed.). Because the Department did not include any Alaska entities in its initial publication and characterized its publication in 1982 of the Alaska entities as a "preliminary list" (47 FR 53133), the intended functions of the publication of the list were not fully implemented for Alaska until October 1993.

The entities listed on the 1982 "preliminary list" parallel the kinds of entities included on the list for the contiguous 48 states. The regional, village and urban corporations organized under state law in accordance with the Alaska Native Claims Settlement Act (ANCSA) (43 U.S.C. 1601 et seq.) were not listed although they had been designated as "tribes" for the purposes of some Federal laws, primarily the Indian Self-Determination and Education Assistance Act (ISDA), 25 U.S.C. 450b(b). In addition, between 1982 and 1986, a number of Alaska Native entities complained that they had been wrongly omitted from the lists that were published in those years. Some groups in the contiguous 48 states have also complained that they had been wrongly left off the lists and should not have to go through the burdensome process of petitioning. While the Department had conceded that its 1982 list for Alaska was "preliminary," it had made no such concession with regard to groups in the contiguous 48 states. Therefore, the Department required all groups from the contiguous 48 states to petition in order to be placed on the list.

In 1988, in an effort to resolve all pending questions as to the Native entities to be listed and the eligibility of entities described as "tribes" by Congress in post-ANCSA legislation but not otherwise thought of as "Indian tribes," i.e., the state-chartered ANCSA Native corporations, the Department published a new list of Alaska entities. The preamble to the list stated that the revised list responded to a "demand by the Bureau and other Federal agencies * * * for a list of organizations which are eligible for their funding and services based on their inclusion in categories frequently mentioned in statutes concerning Federal programs for Indians." 53 FR 52832.

Unfortunately, the 1988 revisions of the Alaska Native entities list appeared to create more questions than it resolved. The omission from the 1988 preamble of all references acknowledging the tribal status of the listed villages, and the inclusion of ANCSA corporations (which are formally state-chartered corporations rather than tribes in the conventional legal or political sense) generated questions as to the status of all the listed entities. Numerous Native villages, regional tribes and other Native organizations objected to the 1988 list on the grounds that it failed to distinguish between Native corporations and Native tribes and failed to unequivocally recognize the tribal status of the listed villages and regional tribes That the Department had considered Alaska Native villages to possess tribal status is evident from the Solicitor's 1993 historical review of this matter

In January 1993 the Solicitor of the Department of the Interior issued a comprehensive opinion analyzing the status of Alaska Native villages as "Indian tribes," as that term is commonly used to refer to Indian entities in the contiguous 48 states. After a lengthy historical review and legal analysis, the Solicitor concluded that:

> For the last half century, Congress and the Department have dealt with Alaska Natives as though there were tribes in Alaska. The fact that the Congress and the Department may not have dealt with all Alaska Natives as tribes at all times prior to the 1930's did not preclude it from dealing with them as tribes subsequently.
>
> Sol. Op. M–36975, at 46, 47–48 (Jan. 11, 1993).

Although the Solicitor found it unnecessary for the purposes of his opinion to identify specifically which villages were tribes, he observed that Congress' listing of specific villages in ANCSA and the repeated inclusion of such villages within the definition of "tribes" in post-ANCSA legislation arguably constituted a congressional determination that the villages found eligible for benefits under ANCSA, referred to as the "modified ANCSA list," were Indian tribes for purposes of Federal law. M–36975 at 58–59.

In response to the guidance in the Solicitor's Opinion, the Bureau of Indian Affairs reviewed the "modified ANCSA list" of villages and the list of those villages and regional tribes previously listed or dealt with by the Federal Government as governments. The result of that review was the list of tribal entities published on October 21, 1993. The October 1993 list represents a list only of those villages and regional tribes which the Department believes to have functioned as political entities, exercising governmental authority. The listed entities are, therefore, acknowledged to have "the immunities and privileges available to other federally acknowledged Indian tribes by virtue of their government-to-government relationship with the United States as well as the responsibilities, powers, limitations and obligations of such tribes." 25 CFR 83.2 (1994 ed.).

Inclusion on the list does not resolve the scope of powers of any particular tribe over land or non-members. It only establishes that the listed tribes have the same privileges, immunities, responsibilities and obligations as other Indian tribes under the same or similar circumstances including the right, subject to general principles of Federal Indian law, to exercise the same inherent and delegated authorities available to other tribes.[1]

Subsequent to the publication of the October 1993 list, Congress enacted two significant pieces of legislation. First, in the Act of May 31, 1994 (P.L. 103-263; 108 Stat. 707), Congress confirmed that the Secretary can make no distinctions among tribes as a general matter of Federal law. Second, in the Act of November 2, 1994 (P.L. 103-454; 108 Stat. 4791), Congress confirmed the Secretary's authority and responsibility to establish a list of Indian tribes and mandated that he publish such a list annually. The following list is published in response to that mandate.

Indian Tribal Entities Within the Contiguous 48 States Recognized and Eligible to Receive Services From the Bureau of Indian Affairs

Absentee-Shawnee Tribe of Indians of Oklahoma
Agua Caliente Band of Cahuilla Indians of the Agua Caliente Indian Reservation, California
Ak Chin Indian Community of Papago Indians of the Maricopa, Ak Chin Reservation, Arizona
Alabama and Coushatta Tribes of Texas
Alabama-Quassarte Tribal Town of the Creek Nation of Oklahoma
Alturas Indian Rancheria of Pit River Indians of California
Apache Tribe of Oklahoma
Arapahoe Tribe of the Wind River Reservation, Wyoming
Aroostook Band of Micmac Indians of Maine
Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana
Augustine Band of Cahuilla Mission Indians of the Augustine Reservation, California
Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation, Wisconsin
Bay Mills Indian Community of the Sault Ste. Marie Band of Chippewa Indians, Bay Mill Reservation, Michigan
Bear River Band of the Rohnerville Rancheria of California
Berry Creek Rancheria of Maidu Indians of California
Big Lagoon Rancheria of Smith River Indians of California
Big Pine Band of Owens Valley Paiute Shoshone Indians of the Big Pine Reservation, California
Big Sandy Rancheria of Mono Indians of California
Big Valley Rancheria of Pomo & Pit River Indians of California
Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
Blue Lake Rancheria of California
Bridgeport Paiute Indian Colony of California
Buena Vista Rancheria of Me-Wuk Indians of California
Burns Paiute Tribe of the Burns Paiute Indian Colony of Oregon
Cabazon Band of Cahuilla Mission Indians of the Cabazon Reservation, California
Cachil DeHe Band of Wintun Indians of the Colusa Indian Community of the Colusa Rancheria, California
Caddo Indian Tribe of Oklahoma
Cahuilla Band of Mission Indians of the Cahuilla Reservation, California
Cahto Indian Tribe of the Laytonville Rancheria, California
Campo Band of Diegueno Mission Indians of the Campo Indian Reservation, California
Capitan Grande Band of Diegueno Mission Indians of California:
Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California
Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California
Catawba Tribe of South Carolina
Cayuga Nation of New York
Cedarville Rancheria of Northern Paiute Indians of California
Chemehuevi Indian Tribe of the Chemehuevi Reservation, California
Cher-Ae Heights Indian Community of the Trinidad Rancheria, California
Cherokee Nation of Oklahoma
Cheyenne-Arapaho Tribes of Oklahoma
Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota
Chickasaw Nation of Oklahoma
Chicken Ranch Rancheria of Me-Wuk Indians of California
Chippewa-Cree Indians of the Rocky Boy's Reservation, Montana
Chitimacha Tribe of Louisiana
Choctaw Nation of Oklahoma
Citizen Band Potawatomi Indian Tribe of Oklahoma
Cloverdale Rancheria of Pomo Indians of California
Coast Indian Community of Yurok Indians of the Resighini Rancheria, California
Cocopah Tribe of Arizona
Coeur D'Alene Tribe of the Coeur D'Alene Reservation, Idaho
Cold Springs Rancheria of Mono Indians of California
Colorado River Indian Tribes of the Colorado River Indian Reservation, Arizona and California
Comanche Indian Tribe of Oklahoma
Confederated Salish & Kootenai Tribes of the Flathead Reservation, Montana
Confederated Tribes of the Chehalis Reservation, Washington
Confederated Tribes of the Colville Reservation, Washington
Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians of Oregon
Confederated Tribes of the Goshute Reservation, Nevada and Utah
Confederated Tribes of the Grand Ronde Community of Oregon
Confederated Tribes of the Siletz Reservation, Oregon
Confederated Tribes of the Umatilla Reservation, Oregon
Confederated Tribes of the Warm Springs Reservation of Oregon
Confederated Tribes and Bands of the Yakama Indian Nation of the Yakama Reservation Washington
Coquille Tribe of Oregon
Cortina Indian Rancheria of Wintun Indians of California
Coushatta Tribe of Louisiana
Cow Creek Band of Umpqua Indians of Oregon
Coyote Valley Band of Pomo Indians of California
Crow Tribe of Montana

[1] Sol. Op. M-36975 concluded, concerning general principles of Federal Indian law and ANCSA, that "notwithstanding the potential that Indian country still exists in Alaska in certain limited cases, Congress has left little or no room for tribes in Alaska to exercise governmental authority over land or nonmembers." M-36975 at 108. That portion of the opinion is subject to review, but has not been withdrawn or modified.

Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota
Cuyapaipe Community of Diegueno Mission Indians of the Cuyapaipe Reservation, California
Death Valley Timbi-Sha Shoshone Band of California
Delaware Tribe of Western Oklahoma
Devils Lake Sioux Tribe of the Devils Lake Sioux Reservation, North Dakota
Dry Creek Rancheria of Pomo Indians of California
Duckwater Shoshone Tribe of the Duckwater Reservation, Nevada
Eastern Band of Cherokee Indians of North Carolina
Eastern Shawnee Tribe of Oklahoma
Elem Indian Colony of Pomo Indians of the Sulphur Bank Rancheria, California
Elk Valley Rancheria of California
Ely Shoshone Tribe of Nevada
Enterprise Rancheria of Maidu Indians of California
Flandreau Santee Sioux Tribe of South Dakota
Forest County Potawatomi Community of Wisconsin Potawatomie Indians, Wisconsin
Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
Fort Bidwell Indian Community of Paiute Indians of the Fort Bidwell Reservation, California
Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California
Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada
Fort McDowell Mohave-Apache Indian Community of the Fort McDowell Indian Reservation, Arizona
Fort Mojave Indian Tribe of Arizona
Fort Sill Apache Tribe of Oklahoma
Gila River Pima-Maricopa Indian Community of the Gila River Indian Reservation of Arizona
Grand Traverse Band of Ottawa & Chippewa Indians of Michigan
Greenville Rancheria of Maidu Indians of California
Grindstone Indian Rancheria of Wintun-Wailaki Indians of California
Guidiville Rancheria of California
Hannahville Indian Community of Wisconsin Potawatomie Indians of Michigan
Havasupai Tribe of the Havasupai Reservation, Arizona
Ho-Chunk Nation of Wisconsin (formerly known as the Wisconsin Winnebago Tribe)
Hoh Indian Tribe of the Hoh Indian Reservation, Washington
Hoopa Valley Tribe of the Hoopa Valley Reservation, California
Hopi Tribe of Arizona
Hopland Band of Pomo Indians of the Hopland Reservation, California
Houlton Band of Maliseet Indians of Maine
Hualapai Indian Tribe of the Hualapai Indian Reservation, Arizona
Inaja Band of Diegueno Mission Indians of the Inaja and Cosmit Reservation, California
Ione Band of Miwok Indians of California
Iowa Tribe of Kansas and Nebraska
Iowa Tribe of Oklahoma
Jackson Rancheria of Me-Wuk Indians of California
Jamestown Klallam Tribe of Washington
Jamul Indian Village of California
Jicarilla Apache Tribe of the Jicarilla Apache Indian Reservation, New Mexico
Kaibab Band of Paiute Indians of the Kaibab Indian Reservation, Arizona
Kalispel Indian Community of the Kalispel Reservation, Washington
Karuk Tribe of California
Kashia Band of Pomo Indians of the Stewarts Point Rancheria, California
Kaw Indian Tribe of Oklahoma
Keweenaw Bay Indian Community of L'Anse and Ontonagon Bands of Chippewa Indians of the L'Anse Reservation, Michigan
Kialegee Tribal Town of the Creek Indian Nation of Oklahoma
Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
Kickapoo Tribe of Oklahoma
Kickapoo Traditional Tribe of Texas
Kiowa Indian Tribe of Oklahoma
Klamath Indian Tribe of Oregon
Kootenai Tribe of Idaho
La Jolla Band of Luiseno Mission Indians of the La Jolla Reservation, California
La Posta Band of Diegueno Mission Indians of the La Posta Indian Reservation, California
Lac Courte Oreilles Band of Lake Superior Chippewa Indians of the Lac Courte Oreilles Reservation of Wisconsin
Lac du Flambeau Band of Lake Superior Chippewa Indians of the Lac du Flambeau Reservation of Wisconsin
Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan
Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada
Little River Band of Ottawa Indians of Michigan
Little Traverse Bay Bands of Odawa Indians of Michigan
Los Coyotes Band of Cahuilla Mission Indians of the Los Coyotes Reservation, California
Lovelock Paiute Tribe of the Lovelock Indian Colony, Nevada
Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota
Lower Elwha Tribal Community of the Lower Elwha Reservation, Washington
Lower Sioux Indian Community of Minnesota Mdewakanton Sioux Indians of the Lower Sioux Reservation in Minnesota
Lummi Tribe of the Lummi Reservation, Washington
Lytton Rancheria of California
Makah Indian Tribe of the Makah Indian Reservation, Washington
Manchester Band of Pomo Indians of the Manchester-Point Arena Rancheria, California
Manzanita Band of Diegueno Mission Indians of the Manzanita Reservation, California
Mashantucket Pequot Tribe of Connecticut
Mechoopda Indian Tribe of Chico Rancheria, California
Menominee Indian Tribe of Wisconsin
Mesa Grande Band of Diegueno Mission Indians of the Mesa Grande Reservation, California
Mescalero Apache Tribe of the Mescalero Reservation, New Mexico
Miami Tribe of Oklahoma
Miccosukee Tribe of Indians of Florida
Middletown Rancheria of Pomo Indians of California
Minnesota Chippewa Tribe, Minnesota (Six component reservations: Bois Forte Band (Nett Lake); Fond du Lac Band; Grand Portage Band; Leech Lake Band; Mille Lac Band; White Earth Band)
Mississippi Band of Choctaw Indians, Mississippi
Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada
Modoc Tribe of Oklahoma
Mohegan Indian Tribe of Connecticut
Mooretown Rancheria of Maidu Indians of California
Morongo Band of Cahuilla Mission Indians of the Morongo Reservation, California
Muckleshoot Indian Tribe of the Muckleshoot Reservation, Washington
Muskogee (Creek) Nation of Oklahoma
Narragansett Indian Tribe of Rhode Island
Navajo Tribe of Arizona, New Mexico & Utah
Nez Perce Tribe of Idaho
Nisqually Indian Tribe of the Nisqually Reservation, Washington
Nooksack Indian Tribe of Washington
Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana
Northfork Rancheria of Mono Indians of California
Northwestern Band of the Shoshoni Nation of Utah (Washakie)
Oglala Sioux Tribe of the Pine Ridge Reservation, South Dakota
Omaha Tribe of Nebraska

Oneida Nation of New York
Oneida Tribe of Wisconsin
Onondaga Nation of New York
Osage Nation of Oklahoma
Ottawa Tribe of Oklahoma
Otoe-Missouria Tribe of Oklahoma
Paiute Indian Tribe of Utah
Paiute-Shoshone Indians of the Bishop Community of the Bishop Colony, California
Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada
Paiute-Shoshone Indians of the Lone Pine Community of the Lone Pine Reservation, California
Pala Band of Luiseno Mission Indians of the Pala Reservation, California
Pascua Yaqui Tribe of Arizona
Paskenta Band of Nomlaki Indians of California
Passamaquoddy Tribe of Maine
Pauma Band of Luiseno Mission Indians of the Pauma & Yuima Reservation, California
Pawnee Indian Tribe of Oklahoma
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, California
Penobscot Tribe of Maine
Peoria Tribe of Oklahoma
Picayune Rancheria of Chukchansi Indians of California
Pinoleville Rancheria of Pomo Indians of California
Pit River Tribe of California (includes Big Bend, Lookout, Montgomery Creek & Roaring Creek Rancherias & XL Ranch)
Poarch Band of Creek Indians of Alabama
Pokagon Band of Potawatomi Indians of Michigan
Ponca Tribe of Indians of Oklahoma
Ponca Tribe of Nebraska
Port Gamble Indian Community of the Port Gamble Reservation, Washington
Potter Valley Rancheria of Pomo Indians of California
Prairie Band of Potawatomi Indians of Kansas
Prairie Island Indian Community of Minnesota Mdewakanton Sioux Indians of the Prairie Island Reservation, Minnesota
Pueblo of Acoma, New Mexico
Pueblo of Cochiti, New Mexico
Pueblo of Jemez, New Mexico
Pueblo of Isleta, New Mexico
Pueblo of Laguna, New Mexico
Pueblo of Nambe, New Mexico
Pueblo of Picuris, New Mexico
Pueblo of Pojoaque, New Mexico
Pueblo of San Felipe, New Mexico
Pueblo of San Juan, New Mexico
Pueblo of San Ildefonso, New Mexico
Pueblo of Sandia, New Mexico
Pueblo of Santa Ana, New Mexico
Pueblo of Santa Clara, New Mexico
Pueblo of Santo Domingo, New Mexico
Pueblo of Taos, New Mexico
Pueblo of Tesuque, New Mexico
Pueblo of Zia, New Mexico
Puyallup Tribe of the Puyallup Reservation, Washington
Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Washington
Quapaw Tribe of Oklahoma
Quartz Valley Indian Community of the Quartz Valley Reservation of California
Quechan Tribe of the Fort Yuma Indian Reservation, California
Quileute Tribe of the Quileute Reservation, Washington
Quinault Tribe of the Quinault Reservation, Washington
Ramona Band or Village of Cahuilla Mission Indians of California
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
Red Lake Band of Chippewa Indians of the Red Lake Reservation, Minnesota
Redding Rancheria of California
Redwood Valley Rancheria of Pomo Indians of California
Reno-Sparks Indian Colony, Nevada
Rincon Band of Luiseno Mission Indians of the Rincon Reservation, California
Robinson Rancheria of Pomo Indians of California
Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota
Round Valley Indian Tribes of the Round Valley Reservation, California (formerly known as the Covelo Indian Community)
Rumsey Indian Rancheria of Wintun Indians of California
Sac & Fox Tribe of the Mississippi in Iowa
Sac & Fox Nation of Missouri in Kansas and Nebraska
Sac & Fox Nation of Oklahoma
Saginaw Chippewa Indian Tribe of Michigan, Isabella Reservation
Salt River Pima-Maricopa Indian Community of the Salt River Reservation, Arizona
San Carlos Apache Tribe of the San Carlos Reservation, Arizona
San Juan Southern Paiute Tribe of Arizona
San Manuel Band of Serrano Mission Indians of the San Manual Reservation, California
San Pasqual Band of Diegueno Mission Indians of California
Santa Rosa Indian Community of the Santa Rosa Rancheria, California
Santa Rosa Band of Cahuilla Mission Indians of the Santa Rosa Reservation, California
Santa Ynez Band of Chumash Mission Indians of the Santa Ynez Reservation, California
Santa Ysabel Band of Diegueno Mission Indians of the Santa Ysabel Reservation, California
Santee Sioux Tribe of the Santee Reservation of Nebraska
Sauk-Suiattle Indian Tribe of Washington
Sault Ste. Marie Tribe of Chippewa Indians of Michigan
Scotts Valley Band of Pomo Indians of California
Seminole Nation of Oklahoma
Seminole Tribe of Florida, Dania, Big Cypress & Brighton Reservations
Seneca Nation of New York
Seneca-Cayuga Tribe of Oklahoma
Shakopee Mdewakanton Sioux Community of Minnesota (Prior Lake)
Sheep Ranch Rancheria of Me-Wuk Indians of California
Sherwood Valley Rancheria of Pomo Indians of California
Shingle Springs Band of Miwok Indians, Shingle Springs Rancheria (Verona Tract), California
Shoalwater Bay Tribe of the Shoalwater Bay Indian Reservation, Washington
Shoshone Tribe of the Wind River Reservation, Wyoming
Shoshone-Bannock Tribes of the Fort Hall Reservation of Idaho
Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada
Sisseton-Wahpeton Sioux Tribe of the Lake Traverse Reservation, South Dakota
Skokomish Indian Tribe of the Skokomish Reservation, Washington
Skull Valley Band of Goshute Indians of Utah
Smith River Rancheria of California
Soboba Band of Luiseno Mission Indians of the Soboba Reservation, California
Sokaogon Chippewa Community of the Mole Lake Band of Chippewa Indians, Wisconsin
Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado
Spokane Tribe of the Spokane Reservation, Washington
Squaxin Island Tribe of the Squaxin Island Reservation, Washington
St. Croix Chippewa Indians of Wisconsin, St. Croix Reservation
St. Regis Band of Mohawk Indians of New York
Standing Rock Sioux Tribe of North & South Dakota
Stockbridge-Munsee Community of Mohican Indians of Wisconsin
Stillaguamish Tribe of Washington
Summit Lake Paiute Tribe of Nevada
Suquamish Indian Tribe of the Port Madison Reservation, Washington
Susanville Indian Rancheria of Paiute, Maidu, Pit River & Washoe Indians of California
Swinomish Indians of the Swinomish Reservation, Washington
Sycuan Band of Diegueno Mission Indians of California

Table Bluff Rancheria of Wiyot Indians of California
Table Mountain Rancheria of California
Te-Moak Tribes of Western Shoshone Indians of Nevada
Thlopthlocco Tribal Town of the Creek Nation of Oklahoma
Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota
Tohono O'odham Nation of Arizona (formerly known as the Papago Tribe of the Sells, Gila Bend & San Xavier Reservation, Arizona)
Tonawanda Band of Seneca Indians of New York
Tonkawa Tribe of Indians of Oklahoma
Tonto Apache Tribe of Arizona
Torres-Martinez Band of Cahuilla Mission Indians of California
Tule River Indian Tribe of the Tule River Reservation, California
Tulalip Tribes of the Tulalip Reservation, Washington
Tunica-Biloxi Indian Tribe of Louisiana
Tuolumne Band of Me-Wuk Indians of the Tuolumne Rancheria of California
Turtle Mountain Band of Chippewa Indians of North Dakota
Tuscarora Nation of New York
Twenty-Nine Palms Band of Luiseno Mission Indians of California
United Auburn Indian Community of the Auburn Rancheria of California
United Keetoowah Band of Cherokee Indians of Oklahoma
Upper Lake Band of Pomo Indians of Upper Lake Rancheria of California
Upper Sioux Indian Community of the Upper Sioux Reservation, Minnesota
Upper Skagit Indian Tribe of Washington
Ute Indian Tribe of the Uintah & Ouray Reservation, Utah
Ute Mountain Tribe of the Ute Mountain Reservation, Colorado, New Mexico & Utah
Utu Utu Gwaitu Paiute Tribe of the Benton Paiute Reservation, California
Walker River Paiute Tribe of the Walker River Reservation, Nevada
Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts
Washoe Tribe of Nevada & California (Carson Colony, Dresslerville & Washoe Ranches)
White Mountain Apache Tribe of the Fort Apache Reservation, Arizona
Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie) of Oklahoma
Winnebago Tribe of Nebraska
Winnemucca Indian Colony of Nevada
Wyandotte Tribe of Oklahoma
Yankton Sioux Tribe of South Dakota
Yavapai Apache Nation of the Camp Verde Reservation, Arizona
Yavapai-Prescott Tribe of the Yavapai Reservation, Arizona
Yerington Paiute Tribe of the Yerington Colony & Campbell Ranch, Nevada
Yomba Shoshone Tribe of the Yomba Reservation, Nevada
Ysleta Del Sur Pueblo of Texas
Yurok Tribe of the Yurok Reservation, California
Zuni Tribe of the Zuni Reservation, New Mexico

Native Entities Within the State of Alaska Recognized and Eligible to Receive Services From the United States Bureau of Indian Affairs

Village of Afognak
Native Village of Akhiok
Akiachak Native Community
Akiak Native Community
Native Village of Akutan
Village of Alakanuk
Alatna Village
Native Village of Aleknagik
Algaaciq Native Village (St. Mary's)
Allakaket Village
Native Village of Ambler
Village of Anaktuvuk Pass
Yupiit of Andreafski
Angoon Community Association
Village of Aniak
Anvik Village
Arctic Village (See Native Village of Venetie Tribal Government)
Native Village of Atka
Atqasuk Village (Atkasook)
Village of Atmautluak
Native Village of Barrow
Beaver Village
Native Village of Belkofski
Village of Bill Moore's Slough
Birch Creek Village
Native Village of Brevig Mission
Native Village of Buckland
Native Village of Cantwell
Native Village of Chanega (aka Chenega)
Chalkyitsik Village
Village of Chefornak
Chevak Native Village
Chickaloon Native Village
Native Village of Chignik
Native Village of Chignik Lagoon
Chignik Lake Village
Chilkat Indian Village (Klukwan)
Chilkoot Indian Association (Haines)
Chinik Eskimo Community (Golovin)
Native Village of Chistochina
Native Village of Chitina
Native Village of Chuathbaluk (Russian Mission, Kuskokwim)
Chuloonawick Native Village
Circle Native Community
Village of Clarks Point
Native Village of Council
Craig Community Association
Village of Crooked Creek
Native Village of Deering
Native Village of Dillingham
Native Village of Diomede (aka Inalik)
Village of Dot Lake
Douglas Indian Association
Native Village of Eagle
Native Village of Eek
Egegik Village
Eklutna Native Village
Native Village of Ekuk
Ekwok Village
Native Village of Elim
Emmonak Village
Evansville Village (aka Bettles Field)
Native Village of Eyak (Cordova)
Native Village of False Pass
Native Village of Fort Yukon
Native Village of Gakona
Galena Village (aka Louden Village)
Native Village of Gambell
Native Village of Georgetown
Native Village of Goodnews Bay
Organized Village of Grayling (aka Holikachuk)
Gulkana Village
Native Village of Hamilton
Healy Lake Village
Holy Cross Village
Hoonah Indian Association
Native Village of Hooper Bay
Hughes Village
Huslia Village
Hydaburg Cooperative Association
Igiugig Village
Village of Iliamna
Inupiat Community of the Arctic Slope
Ivanoff Bay Village
Kaguyak Village
Organized Village of Kake
Kaktovik Village (aka Barter Island)
Village of Kalskag
Village of Kaltag
Native Village of Kanatak
Native Village of Karluk
Organized Village of Kasaan
Native Village of Kasigluk
Kenaitze Indian Tribe
Ketchikan Indian Corporation
Native Village of Kiana
Agdaagux Tribe of King Cove
King Island Native Community
Native Village of Kipnuk
Native Village of Kivalina
Klawock Cooperative Association
Native Village of Kluti Kaah (aka Copper Center)
Knik Tribe
Native Village of Kobuk
Kokhanok Village
Kolliganek Village
Native Village of Kongiganak
Village of Kotlik
Native Village of Kotzebue
Native Village of Koyuk
Koyukuk Native Village
Organized Village of Kwethluk
Native Village of Kwigillingok
Native Village of Kwinhagak (aka Quinhagak)
Native Village of Larsen Bay
Levelock Village
Lesnoi Village (aka Woody Island)
Lime Village
Village of Lower Kalskag
Manley Hot Springs Village
Manokotak Village

Native Village of Marshall (aka Fortuna Ledge)
Native Village of Mary's Igloo
McGrath Native Village
Native Village of Mekoryuk
Mentasta Lake Village
Metlakatla Indian Community, Annette Island Reserve
Native Village of Minto
Native Village of Mountain Village
Naknek Native Village
Native Village of Nanwalek (aka English Bay)
Native Village of Napaimute
Native Village of Napakiak
Native Village of Napaskiak
Native Village of Nelson Lagoon
Nenana Native Association
New Stuyahok Village
Newhalen Village
Newtok Village
Native Village of Nightmute
Nikolai Village
Native Village of Nikolski
Ninilchik Village
Native Village of Noatak
Nome Eskimo Community
Nondalton Village
Noorvik Native Community
Northway Village
Native Village of Nuiqsut (aka Nooiksut)
Nulato Village
Native Village of Nunapitchuk
Village of Ohogamiut
Village of Old Harbor
Orutsararmuit Native Village (aka Bethel)
Oscarville Traditional Village
Native Village of Ouzinkie
Native Village of Paimiut
Pauloff Harbor Village
Pedro Bay Village
Native Village of Perryville
Petersburg Indian Association
Native Village of Pilot Point
Pilot Station Traditional Village
Native Village of Pitka's Point
Platinum Traditional Village
Native Village of Point Hope
Native Village of Point Lay
Native Village of Port Graham
Native Village of Port Heiden
Native Village of Port Lions
Portage Creek Village (aka Ohgsenakale)
Pribilof Islands Aleut Communities of St. Paul & St. George Islands
Qagan Toyagungin Tribe of Sand Point Village
Rampart Village
Village of Red Devil
Native Village of Ruby
Native Village of Russian Mission (Yukon)
Village of Salamatoff
Organized Village of Saxman
Native Village of Savoonga
Saint George (See Pribilof Islands Aleut Communities of St. Paul & St. George Islands)
Native Village of Saint Michael
Saint Paul (See Pribilof Islands Aleut Communities of St. Paul & St. George Islands)
Native Village of Scammon Bay
Native Village of Selawik
Seldovia Village Tribe
Shageluk Native Village
Native Village of Shaktoolik
Native Village of Sheldon's Point
Native Village of Shishmaref
Native Village of Shungnak
Sitka Tribe of Alaska
Skagway Village
Village of Sleetmute
Village of Solomon
South Naknek Village
Stebbins Community Association
Native Village of Stevens
Village of Stony River
Takotna Village
Native Village of Tanacross
Native Village of Tanana
Native Village of Tatitlek
Native Village of Tazlina
Telida Village
Native Village of Teller
Native Village of Tetlin
Central Council of the Tlingit & Haida Indian Tribes
Traditional Village of Togiak
Native Village of Toksook Bay
Tuluksak Native Community
Native Village of Tuntutuliak
Native Village of Tununak
Twin Hills Village
Native Village of Tyonek
Ugashik Village
Umkumiute Native Village
Native Village of Unalakleet
Qawalingin Tribe of Unalaska
Native Village of Unga
Village of Venetie (See Native Village of Venetie Tribal Government)
Native Village of Venetie Tribal Government (Arctic Village and Village of Venetie)
Village of Wainwright
Native Village of Wales
Native Village of White Mountain
Wrangell Cooperative Association
Yakutat Tlingit Tribe

Ada E. Deer,
Assistant Secretary—Indian Affairs

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EXPLORING MARKETING RESEARCH

William G. Zikmund
Oklahoma State University

THE DRYDEN PRESS
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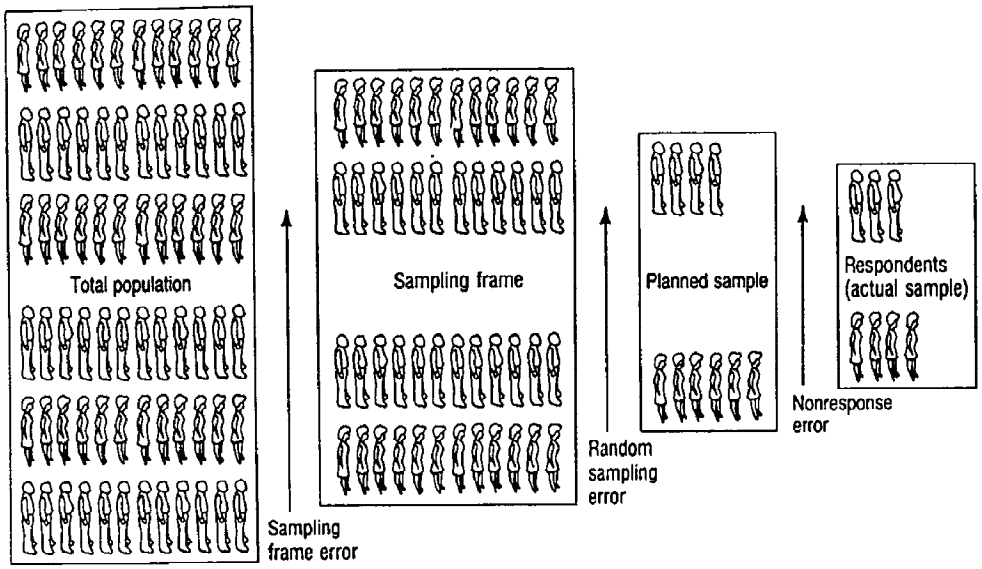
EXHIBIT 15.6 **Errors Associated with Sampling**



Source: Adapted with the permission of Scott, Foresman and Company from Keith K. Cox and Ben M. Enis, *The Marketing Research Process* (Pacific Palisades, CA: Goodyear, 1972), and Danny N. Bellenger and Barnet A. Greenberg, *Marketing Research: A Management Information Approach* (Homewood, IL: Richard D. Irwin, 1978) 154–155.

PROBABILITY VERSUS NONPROBABILITY SAMPLING

There are several alternative ways to take a sample. The major alternative sampling plans may be grouped into probability techniques and nonprobability techniques.

Probability sampling A sampling technique in which every member of the population will have a known, nonzero probability of selection.

Nonprobability sampling A sampling technique in which units of the sample are selected on the basis of personal judgment or convenience; the probability of any particular member of the population being chosen is unknown.

In **probability sampling**, every element in the population has a *known, nonzero probability* of selection.[8] The simple random sample, in which each member of the population has an equal probability of being selected, is the best-known probability sample.

In **nonprobability sampling**, the probability of any particular member of the population being chosen is unknown. The selection of sampling units in nonprobability sampling is quite arbitrary, as researchers rely heavily on personal judgment. *There are no appropriate statistical techniques for measuring random sampling error from a nonprobability sample. Thus, projecting the data beyond the sample is statistically inappropriate.* Nevertheless, there are occasions when nonprobability samples are best suited for the researcher's purpose.

We will now explore the various types of nonprobability and probability sampling. Although probability sampling is preferred, we will discuss nonprobability sampling first to illustrate some potential sources of error and other weaknesses in sampling.

NONPROBABILITY SAMPLING

Convenience Sampling

Convenience sampling
The sampling procedure of obtaining those people or units that are most conveniently available.

Convenience sampling (also called *haphazard* or *accidental sampling*) refers to the sampling procedure of obtaining the people or units that are most conveniently available. It may be convenient and economical to set up an interviewing booth from which to intercept consumers at a shopping center. During election times, television stations often present person-on-the-street interviews that are presumed to reflect public opinion. (Of course, the television station often warns that the survey was "unscientific and random" [sic].) The college professor who uses his or her students has a captive sample—convenient but perhaps unwilling and unrepresentative.

Researchers generally use convenience samples to obtain a large number of completed questionnaires quickly and economically. For example, it was supposedly a person-on-the-street straw poll, conducted by the *Chicago Sun Times*, that alerted former Senator Charles Percy to his problems in his first reelection campaign.[9] The user of research based on a convenience sample should remember that projecting the results beyond the specific sample is inappropriate. Convenience samples are best used for exploratory research when additional research will subsequently be conducted with a probability sample.

In many cases, a research project using convenience sampling signals that the entire research project may lack objectivity. A supposedly "nationwide" poll in France was conducted with 1,000 Parisians[10]—an example of how not to select a convenience sample. Not surprisingly, it was conducted by IFOP, a French opinion research firm that had been involved in tampering with survey results.

Judgment Sampling

Judgment (purposive) sampling
A nonprobability sampling technique in which an experienced researcher selects the sample based on personal judgment about some appropriate characteristic of the sample member.

Judgment or **purposive sampling** is a nonprobability sampling technique in which an experienced individual selects the sample based on his or her judgment about some appropriate characteristic required of the sample member. The consumer price index (CPI) is based on a judgment sample of market-basket items, housing costs, and other selected goods and services expected to reflect a representative sample of items consumed by most Americans. Test market cities often are selected because they are viewed as "typical" cities whose demographic profiles closely match the national profile. A fashion manufacturer regularly selects a sample of key accounts that it believes are capable of providing the information needed to predict what will sell in the fall; the sample is selected to achieve a specific objective.

Judgment sampling often is used in attempts to forecast election results. People frequently wonder how a television network can predict the results of an election with only 2 percent of the votes reported. Political and sampling experts judge which small voting districts approximate overall state returns from previous election years. Then these *bellwether precincts* are selected as the sampling units. Of course, the assumption is that the past voting nature of these districts is still representative of the state's political behavior.

Quota Sampling

Suppose a firm wishes to investigate consumers who currently own videocassette recorders. The researchers may wish to ensure that each brand of videocassette

recorder is proportionately included in the sample. Strict probability sampling procedures would likely underrepresent certain brands and overrepresent other brands. If the selection process were left strictly to chance, some variation would be expected. The purpose of quota sampling is to ensure that the various subgroups in a population are represented on pertinent sample characteristics to the exact extent that the investigators desire. Stratified sampling, a probability sampling procedure, also has this objective, but it should not be confused with quota sampling. In quota sampling, the interviewer has a quota to achieve. For example, an interviewer in a particular city may be assigned 100 interviews, 30 with Panasonic videocassette owners, 20 with Magnavox owners, 18 with Sony Betamax owners, 7 with Toshiba owners, and the rest with owners of other brands. The interviewer is responsible for finding enough people to meet the quota. Aggregating the various interview quotas yields a sample representing the desired proportion of each subgroup.

Quota sampling
A nonprobability sampling procedure that ensures that various subgroups of a population will be represented on pertinent characteristics to the exact extent that the investigator desires.

Possible Sources of Bias. The logic of classifying the population by pertinent subgroups is essentially sound. However, because respondents are selected according to a convenience sampling procedure rather than on a probability basis as in stratified sampling, the haphazard selection of subjects may introduce bias. For example, a college professor hired some of his students to conduct a quota sample based on age. When analyzing the data, the professor discovered that almost all the people in the "under 25 years" category were college educated. Interviewers, being human, tend to prefer to interview people who are similar to themselves. Quota samples tend to include people who are easily found, willing to be interviewed, and middle class. Fieldworkers are given considerable leeway to exercise their judgment concerning selection of actual respondents. Interviewers often concentrate their interviewing in heavy pedestrian-traffic areas, such as downtowns, shopping malls, and college campuses. Those who interview door-to-door learn quickly that quota requirements are difficult to meet by interviewing whoever happens to appear at the door; this tends to overrepresent less active people who are likely to stay at home. One interviewer related a story of working in an upper-middle-class neighborhood. After a few blocks, it changed into a neighborhood of "mansions." Feeling that most of the would-be subjects were above his station, the interviewer skipped these houses because he felt uncomfortable knocking on doors that would be answered by servants.

Advantages of Quota Sampling. Speed of data collection, lower costs, and convenience are the major advantages of quota sampling over probability sampling. Although this method has many problems, careful supervision of the data collection may provide a representative sample for analyzing the various subgroups within a population. Quota sampling may be appropriate when the researcher knows that a certain demographic group is more likely to refuse to cooperate with a survey. For instance, if older men are more likely to refuse, a higher quota can be set for this group so that the proportions of each demographic category will be similar to the proportions in the population. A number of laboratory experiments also rely on quota sampling, because it is difficult to find a sample of the general population who are willing to visit a laboratory to participate in an experiment.

Snowball Sampling

Snowball sampling
A sampling procedure in which initial respondents are selected by probability methods and additional respondents are obtained from information provided by the initial respondents.

Snowball sampling refers to a variety of procedures in which initial respondents are selected by probability methods and additional respondents are obtained from information provided by the initial respondents.[11] This technique is used to locate members of rare populations by referrals. Suppose a manufacturer of sports equipment is considering marketing a mahogany croquet set for serious adult players. This market is certainly small. An extremely large sample would be necessary to find 100 serious adult croquet players. It would be much more economical to survey, say, 300 people and find 15 croquet players and ask them for the names of other players. Reduced sample sizes and costs are a clear-cut advantage of snowball sampling. However, bias is likely to enter into the study, because a person who is known to someone also in the sample has a higher probability of being similar to the first person. If there are major differences between those who are widely known by others and those who are not, this technique may present some serious problems. However, snowball sampling may be used to locate and recruit heavy users, such as consumers who buy more than 50 compact discs per year, for focus groups. As the focus group is not expected to be a generalizable sample, snowball sampling may be very appropriate.[12]

PROBABILITY SAMPLING

All probability samples are based on chance selection procedures.[13] This eliminates the bias inherent in nonprobability sampling procedures, because the probability sampling process is random. Note that the term *random* refers to the procedure for selecting the sample; it does not describe the data in the sample.[14] *Randomness* refers to a procedure whose outcome cannot be predicted because it is dependent on chance. It should not be thought of as unplanned or unscientific—it is the basis of all probability sampling techniques. In this section, we will examine the various probability sampling methods.

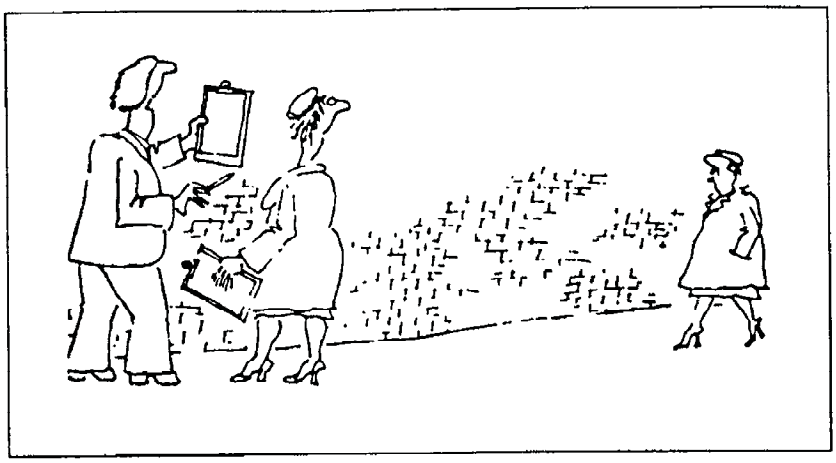
Simple Random Sampling

Simple random sampling
A sampling procedure that assures each element in the population of an equal chance of being included in the sample.

Simple random sampling is a sampling procedure that ensures that each element in the population will have an equal chance of being included in the sample. Drawing names from a hat or selecting the winning raffle ticket from a large drum is a typical example of simple random sampling. If the names or raffle tickets are thoroughly stirred, each person or ticket should have an equal chance of being selected. This process is simple because it requires only one stage of sample selection, in contrast to other, more complex probability samples.

Although drawing names or numbers out of a fishbowl, using a spinner, rolling dice, or turning a roulette wheel may be used to draw a sample from small populations, when populations consist of large numbers of elements, tables of random numbers (see Table A.1 in the Appendix) or computer-generated random numbers are used for sample selection.

Selecting a Random Sample. Suppose a researcher is interested in selecting a random sample of all the Honda dealers in New Mexico, Arizona, and Nevada. Each dealer's name is assigned a number from 1 to 135. Then each number is written on a separate piece of paper, and all the slips are placed in a large drum. After the slips of paper



"Ah—Here comes a cross section of the public now!"

Source: Reprinted with permission from page 12 of the June 11, 1979, issue of *Advertising Age*. Copyright © 1979 by Crain Communications, Inc.

have been thoroughly mixed, one is selected for each sampling unit. Thus, if the sample size is to be 45, the selection procedure must be repeated 44 times after the first slip has been selected. Mixing the slips after each selection will ensure that those at the bottom of the bowl will continue to have an equal chance of being selected in the sample.

To use a table of random numbers, a serial number is assigned to each element of the population. Then, assuming a population of 99,999 or less, five-digit numbers are selected from the table of random numbers merely by reading the numbers in any column or row, by moving upward, downward, left, or right. A random starting point should be selected at the outset. For convenience, we will assume that we have randomly selected the first five digits in columns 1 through 5, row 1, of Table A.1 in the Appendix as our starting point. The first number in our sample would be 37751; moving downward, the following numbers would be 50915, 99142, and so on.

The random digit dialing technique of sample selection requires that the researcher identify the exchange or exchanges of interest (the first three numbers) and then use a table of numbers to select the next four numbers.

Systematic Sampling

Systematic sampling
A sampling procedure in which a starting point is selected by a random process and then every *n*th number on the list is selected.

To illustrate **systematic sampling**, suppose one wishes to take a sample of 1,000 from a list consisting of 200,000 names. Using systematic selection, every 200th name from the list will be drawn.

The procedure is extremely simple. A starting point is selected by a random process; then every *n*th number on the list is selected. In a sampling from a rural telephone directory that does not separate business from residential listings, every 23rd name might be selected as the **sampling interval**. In this sample of consumers, it is possible that Mike's Restaurant will be selected. This unit is inappropriate, because it is a business listing rather than a consumer listing, so the next eligible name is selected as the sampling unit and the systematic process continues.

While this procedure is not actually a random selection procedure, it does yield random results if the arrangement of the items in the list is random in character.

The problem of periodicity occurs if a list has a systematic pattern, that is, is not random in character. Collecting retail sales information every seventh day would result in a distorted sample because there would be a systematic pattern of selecting sampling units. Sales for only one day of the week, perhaps Monday's sales, would be sampled. Another possible periodicity bias might occur in a list of contributors to a charity in which the first 50 are extremely large donors. If the sampling interval is every 200th name, a problem could result. Periodicity is rarely a problem for most sampling in marketing research, but researchers should be aware of its possibility.

Stratified Sampling

Stratified sampling
A probability sampling procedure in which simple random subsamples are drawn from within each stratum that are more or less equal on some characteristic.

The usefulness of dividing the population into subgroups, or *strata,* that are more or less equal with respect to some characteristic was illustrated in our discussion of quota sampling. The first step of choosing strata on the basis of existing information, such as classification of retail outlets' size based on annual sales volume, is the same for both stratified and quota sampling. However, the process of selecting sampling units within the strata differs substantially. In stratified sampling, a subsample is drawn using a simple random sample within each stratum. This is not true with quota sampling.

The reason for taking a stratified sample is to obtain a more efficient sample than would be possible with simple random sampling. Suppose, for example, that urban and rural groups differ widely on attitudes toward energy conservation, but members within each group hold very similar attitudes. Random sampling error will be reduced, because the groups are internally homogeneous but comparatively different between groups. More technically, a smaller standard error may result from this stratified sample because the groups will be adequately represented when strata are combined.

Another reason for conducting a stratified sample is to ensure that the sample will accurately reflect the population on the basis of the criterion or criteria used for stratification. This is a concern because occasionally a simple random sample yields a disproportionate number of one group or another and the representativeness of the sample could be improved.

A researcher selecting a stratified sample will proceed as follows. First, a variable (sometimes several variables) is identified as an efficient basis for stratification. The criterion for a stratification variable is that it be a characteristic of the population elements known to be related to the dependent variable or other variables of interest. The variable chosen should increase homogeneity within each stratum and increase heterogeneity between strata. The stratification variable usually is a categorical variable or one easily converted into categories, that is, subgroups.

For example, a pharmaceutical company interested in measuring how often physicians prescribe a certain drug might choose physicians' training as a basis for stratification. In this example, the mutually exclusive strata are M.D.'s (medical doctors) and O.D.'s (osteopathic doctors).

Next, for each separate subgroup or stratum, a list of population elements must be obtained. If a complete listing is not available, a true stratified probability sample cannot be selected. Then, using a table of random numbers or some other device, a *separate* simple random sample is taken within each stratum. If stratified lists are not available, they can be costly to prepare. Of course, the researcher must determine how large a sample to draw for each stratum. This issue is discussed in the following section.

Proportional versus Disproportional Strata

Proportional stratified sample
A stratified sample in which the number of sampling units drawn from each stratum is in proportion to the relative population size of that stratum.

If the number of sampling units drawn from each stratum is in proportion to the relative population size of the stratum, the sample is a **proportional stratified sample.** Sometimes, however, a disproportional stratified sample will be selected to ensure an adequate number of sampling units in every strata. Sampling more heavily in a given strata than its relative population size warrants is not a problem if the primary purpose of the research is to estimate some characteristic separately for each stratum, and if researchers are concerned about assessing the differences among strata. Consider, however, the percentage of retail drug outlets presented in Exhibit 15.7. There is a small percentage of large independent stores and a large percentage of other stores. The average store size, in dollar volume, for the chain store and large independent store strata varies substantially from the smaller independent stores' size. To avoid overrepresenting the medium-size and smaller stores in the sample, a disproportionate sample is taken. In a **disproportional stratified sample,** the sample size for each stratum is not allocated on a proportional basis with the population size but dictated by analytical considerations. The logic behind this relates to the general argument for sample size: As variability increases, sample size must increase to provide accurate estimates. Thus, the strata exhibiting the greatest variability are sampled more heavily to increase sample efficiency, that is, smaller random sampling error. In this example, previous experience has shown that there are differences among the strata on dollar volume (average store size). Actually, the example in Exhibit 15.7 illustrates an *optimal allocation stratified sample* that takes both *variation* and *size* of each stratum into consideration. Thus, the optimal sample size for each stratum may be determined. Complex formulas (beyond the scope of an introductory course in marketing research) have been developed for determining sample size for each stratum. A simplified rule of thumb for understanding the concept of **optimal allocation** is that the stratum sample size increases for strata of larger sizes with the greatest relative variability. Other complexities arise in determining population estimates. For example, when disproportional stratified sampling is used, the estimated means for each stratum has to be weighted according to the number of elements in each stratum to calculate the total population mean.

Disproportional stratified sample
A stratified sample in which the sample size for each stratum is allocated according to analytical considerations.

Cluster Sampling

Cluster sampling
An economically efficient sampling technique in which the primary sampling unit is not the individual element in the population but a large cluster of elements; clusters are selected randomly.

The purpose of **cluster sampling** is to sample economically while retaining the characteristics of a probability sample. Consider the researcher who must conduct 500 interviews with consumers scattered throughout the United States. Travel costs are likely to be enormous, because the amount of time spent traveling will be substantially greater than the time spent in the interviewing process. If an aspirin marketer can assume the product will work as well in Phoenix as it does in Baltimore, or if a frozen pizza manufacturer assumes its product will taste the same in Texas as it does in Oregon, cluster sampling may be used. In a cluster sample, the primary sampling unit is no longer the individual element in the population (for example, grocery stores) but a larger cluster of elements located in proximity to one another (for example, cities). The **area sample** is the most popular type of cluster sample. A grocery store researcher, for example, may randomly choose several geographical areas as the primary sampling units and then interview all or a sample of grocery stores within the geographical clusters. Interviews are confined to these clusters only. No interviews occur in other clusters. Cluster sampling is classified as a probability sampling technique because of either the random selection of clusters or the random selection of elements within each cluster.

9714

REDSKINS

Conversation w Richard Maisel of April 1, 1997
(Could have also called Marty Frankel)

See P95 of his Dep

1. What Ross did was not a stratified probability sample. By testing only in the "most densely populated" stratum, he artificially restricted his population.

? What proportion of all American Indians live in those 50 counties? The more this departs from 100%, the less projectible it is to the defined universe.

2. By violating the rationale underlying the next birthday method, he completely undermines his ability to call what he did a probibility sample.

Guidelines for the Public Use of Market and Opinion Research

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GUIDELINES FOR THE PUBLIC USE OF MARKET AND OPINION RESEARCH

The Public Affairs Council

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October 1981

PUBLIC AFFAIRS COUNCIL

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GUIDELINES FOR THE PUBLIC USE OF MARKET AND OPINION RESEARCH

This is an effort to state a professional consensus on how market and opinion research for public use should be assessed and what determines how useful, sound and credible particular research may be in such applications. The guidelines which follow outline the criteria which are important in the evaluation of the validity and reliability of research results and of the weight to be given to them.

It was written because research is being used increasingly for public purposes:

- as evidence in legal cases
- as evidence in testimony at government and other public hearings
- in support of advertising or publicity claims for products, candidates or causes
- as support for news stories and features which appear in the press and other media.

These public purposes can and do impact broadly on our lives and our institutions. They are creating a new role for research and a need for new ways to assess its soundness and value.

Research used for public purposes is different from internal or private research in its implications and in its quality requirements. *Research used internally* by companies, individuals or governments only has to meet the requirements of its sponsor, and while it is often done to exacting specifications, it may also be done to standards that are less demanding than those required for public research. It may be useful to its sponsors even though it is selective in its orientation, or based on very limited cases, tests or opinions.

For such research, the sponsor decides how the research will be used and how much credibility and weight to give the results. The sponsor can set the standards because the sponsor bears all the consequences of the research.

However, *when research is put to a public purpose* the situation is different. This research can affect the interests of people and organizations who have neither solicited nor supported it. Once it is published or reported it may come to be put to purposes for which it was not intended, and the public use may impute authority to the research not anticipated by those who designed and conducted it. It may lend an importance that the research itself does not warrant.

Given the potential fallout from research that is put to public use, it is essential that such research be conducted carefully and judged critically.

This is not to say that the standards for such research should be dogmatic or unrealistic. Few absolute standards of quality ever apply to market and opinion research. Decisions about what to do and how many cases to study, and what words to use to communicate what meaning are often pragmatic and, on occasion, somewhat arbitrary.

The realities of the field make compromise inevitable and perfection impossible. Nonetheless, when research is put to public use, it is essential that it be fairly and competently conducted and that it be honestly reported.

The guidelines that follow are intended to aid those who would use research publicly to reach well-considered judgments on the suitability of the research for that purpose.

In the final analysis, a number of factors affect the quality of research and all of them must be considered when the research is judged. The *Guidelines* group these factors into seven areas of evaluation:

A. **ORIGIN** - What is behind the research

B. **DESIGN** - The concept and the plan

C. **EXECUTION** - Collecting and handling the information

D. **STABILITY** - Sample size and reliability

E. **APPLICABILITY** - Generalizing the findings

F. **MEANING** - Interpretations and conclusions

G. **CANDOR** - Open reporting and disclosure

The guidelines for each of the areas identify major issues that must be considered, and state the research principles that should be applied. After each set of guidelines, two sets of questions are listed:

KEY QUESTIONS: These questions are so basic that the usefulness of the research must be open to serious challenge if they cannot all be answered affirmatively from the information provided.

QUALITY CHECKPOINTS: These questions are designed to provide further indications of the value of a piece of research for public use. Some of these questions may not apply or be of critical importance to a specific study. But, generally speaking, the more of these questions that can be answered affirmatively, the sounder the research and the better suited it is to public use.

Most of these questions can be judged by careful study of the research in question, without special technical knowledge, but in some cases, it may be necessary to get a professional research opinion.

A good deal of information is needed to assess how research results may legitimately be used. Those who do the research should provide whatever is needed to judge it. If needed information is not supplied, and the users of the research cannot secure it on their own inquiry and initiative, an assumption that the information would reflect negatively on the study is probably justified. In the final analysis, it is the responsibility of those who elect to put research to public use to demonstrate its soundness and value.

A. ORIGIN - What Is Behind the Research

Research should start with a clear statement of why it was conducted, who paid for it, and who was responsible for the way it was done.

Specific research can be judged best against an understanding of its intent and background. Misrepresenting the source or sponsorship of research or concealing its true purpose from its users distorts its value. Distortion can also occur with the public use of research that was not meant for and is not appropriate to such purpose.

Those who did the research and those who sponsored and designed it should acknowledge their responsibility for it and, when the research is reported, they should say whether or not they concur with the findings as presented.

KEY QUESTIONS:

A-1. Does the report identify the organizations that initiated and that paid for the research? _____

A-2. Is there a statement of the purpose of the research that says clearly what it was meant to accomplish? _____

A-3. Are the organizations which designed and were responsible for conducting the research identified? _____

QUALITY CHECKPOINTS:

A-4. Is there a statement by the sponsors acknowledging their acceptance of the research and its reported findings? _____

A-5. Is there a statement from the responsible researchers of their concurrence with the reported findings? _____

A-6. Are the problems to which the research is directed distinguished from other related or broader problems that the research was not designed to address? _____

A-7. Is the present use of the research the use for which it was designed? _____

B. DESIGN - The Concept and the Plan

The research approach, the sample, and the analysis should be clearly described, and they should conform to the requirements of objective and scientific study, and to the purpose for which the research was conducted.

The universe — which is the population of people, facilities or occurrences to be studied — should be carefully specified, and the sample should be designed to represent that universe.

A plan for the research, covering the kinds of measurements to be made, the method of data collection and a proposal for analyzing the findings, should be set up and agreed to before the research is undertaken.

The research should be designed to produce fair measurements and honest information. It should not try to mislead its users. It should not pretend to an objectivity or a significance it does not merit.

In planning, the time, money and skills to be invested in the research should be balanced against the impact of the expected information. Important decisions ought not to be based on poorly conceived and grossly inadequate studies, nor should great efforts be invested to produce trivial data.

KEY QUESTIONS:

B-1. Is there a full description, in non-technical language, of the research design, including a definition of what is measured and how the data are collected? _____

B-2. Is the design consistent with the stated purpose for which the research was conducted? _____

B-3. Is the design evenhanded, that is, is it free of leading questions and other bias; does it address questions of fact and opinion without inducing answers that unfairly benefit the study sponsors? _____

B-4. Have precautions been taken to avoid or equalize patterns of sequence or timing or other factors that might prejudice or distort the findings? _____

B-5. Does it address questions which respondents are capable of answering? _____

B-6. Is there a precise statement of the universe or population the research is meant to represent? _____

B-7. Does the sampling source or frame fairly represent the population under study? _____

B-8. Does the report specify the kind of sample used, and clearly describe the method of sample selection? _____

B-9. Does the report describe the plan for analysis of the data? _____

B-10. Are copies of all questionnaire forms, field and sampling instructions and other study materials available to anyone with a legitimate interest in the research? _____

QUALITY CHECKPOINTS:

B-11. Does the study use a random sample — that is, one which gives every member of the sampling frame an equal or known chance of selection? _____

B-12. Does the research use procedures for the selection of respondents that are not subject to the orientation or convenience of the interviewers? _____

B-13. If the research calls for continuing panels or repeated studies are there unbiased ways to update or rotate the original sample? _____

B-14. In field use, would the questionnaire hold the interest and attention of the respondents and the interviewer? _____

B-15. Is the information asked for limited to what people can supply and can reasonably be expected to give openly and accurately? _____

B-16. Are study or test conditions or responses relevant to the situation to which the findings are supposed to relate? _____

B-17. Where controls or other products are involved, are they the appropriate ones to be included? _____

B-18. Was the plan for analysis set up and agreed to before the data were collected? _____

C. EXECUTION · Collecting and Handling the Information

The integrity and value of research depends on the competence and honesty with which information is collected and processed. Care in performing these functions determines, in large measure, how good the data finally are.

A vigorous effort should be made to follow and complete the sampling plan. When substitutions are made, they should be explained and documented, whether they are made when the sample is drawn, or in the field, or in tabulation, or weighting. Any weighting or ascription that is employed should be explained in detail.

Data should be carefully gathered, by competent and conscientious people, using forms and methods that are appropriate to the problem. Continuing checks should be made to ensure that data collection procedures are followed and to provide objective evidence on how well the work is done.

Collected data should be processed and analyzed in ways that best preserve and present their meaning.

Departures from the research plan should be avoided, but if they become necessary, they should be disclosed and fully explained.

KEY QUESTIONS:

C-1. Does the report specify the proportion of the designed sample from which information was collected and processed or say the proportion cannot be determined? _____

C-2. Is there an objective report on the care with which the data were collected? _____

C-3. Were those who collected data kept free of clues to the study sponsorship or the expected responses, or other leads or information that might condition or bias the information they obtained and recorded? _____

QUALITY CHECKPOINTS:

C-4. Are the coding rules and procedures available for review? _____

C-5. If the data are weighted, is the range of the weights reported? _____

C-6. Is the basis for the weights described and evaluated? _____

C-7. Is the effect of the weights on the reliability of the final estimates reported? _____

C-8. Were there persistent efforts, through carefully scheduled callbacks, to interview designated respondents? _____

C-9. Is the rate of sample completion calculated on the basis of the total designed sample (including all eligible respondents, whether or not a contact was made or attempted)? _____

C-10. Were objective tests made to determine how completing the balance of the sample would have changed the results? _____

C-11. Does the report discuss any substitutions made for any parts of the selected sample, either in the field or when the sample was designed and drawn, or state that there were no substitutions? _____

C-12. Are problems which were encountered in the course of the data collection reported? _____

C-13. Were the interviewers carefully selected, trained, supervised and paid enough to insure their positive attitude and cooperation? _____

C-14. Were the interviewers compensated on the basis of hours worked rather than on the basis of amount of work completed? _____

C-15. If the research was a continuing design, was the identity of respondents, interviewers and sampling locations protected to avoid possible manipulation of reported behavior or other contamination of future findings? _____

C-16. Was data gathering limited to what was reported firsthand by respondents, or observed directly in the field? _____

C-17. Were there confidential validation checks of the field sampling and the data gathering by unbiased independent researchers with no financial stake in a positive validation? _____

C-18. Does the report give specific information on the results of the field validations? _____

C-19. Does the report give a full explanation of any unplanned or uncommon mathematical manipulation of the collected data? _____

C-20. To the extent that it can be checked, did the data processing preserve the meaning and the integrity of the collected information? _____

C-21. Were the operations of the research opened to objective professional inspection, with full disclosure of the results of such inspection? _____

D. STABILITY · Sample Size and Reliability

The sample size should be reported, and it should be large enough, given the sample design employed, to yield stable results for the selected population.

The reporting of data from sample surveys should carry understandable and correctly calculated information on the statistical reliability of the major findings or a statement that the reliability cannot be computed.

Calculation of sampling error limits should take into account the nature of the sampling design as well as the size of the sample.

Sampling error limits should be stated without implying that the type of error they treat is the only one that may affect the findings. The discussions of data reliability should not obscure possible questions about the overall accuracy (including nonsampling as well as sampling errors).

In repetitive studies, it should be recognized that apparent differences can result simply from changes in time or place or in the test environment or other factors.

KEY QUESTIONS:

D-1. Was the sample large enough to provide stable findings? _____

D-2. Are sampling error limits shown if they can be computed? _____

D-3. Are methods of calculating the sampling error described, or if the error cannot be computed, is this stated and explained? _____

D-4. Does the treatment of sampling error limits make clear that they do not cover nonsampling error? _____

D-5. For the major findings, are the reported error tolerances based on direct analysis of the variability of the collected data? _____

QUALITY CHECKPOINTS:

D-6. Is the sample's reliability discussed in language that can be clearly understood without a technical knowledge of statistics? _____

D-7. Is the unweighted sample size reported both for the sample as a whole and for each subgroup for which data are analyzed? _____

D-8. If findings are reported for small numbers of respondents, are appropriate restrictions brought to the attention of the users of the research? _____

D-9. In balancing disproportionate sampling, were reasonable limits placed on the weights assigned to individual cases? _____

E. APPLICABILITY · Generalizing the Findings

Research is usually not relevant to everybody or forever. In reporting on research, there should be a statement of the population it represents and the conditions under which it applies.

Information should not be generalized if the results do not apply to a broader universe. Statistical projection of the results to a larger population implies that the results represent that population.

Research should not present information drawn largely from sources that are easy to contact or interested in the subject without noting that such persons may not be typical of other parts of the population.

If the source of data is not typical or uncertain, the findings may have little or no general significance, and this should be acknowledged.

The time the data were collected should be specified, and if this influenced or may have influenced the results, a statement to that effect should be included. If the data are time sensitive, they must be viewed in the context of the particular time they were collected.

KEY QUESTIONS:

E-1. Does the report specify when the data were collected? _____

E-2. Does the report say clearly whether its findings do or do not apply beyond the direct source of the data? _____

E-3. Is it clear who is underrepresented by the research, or not represented at all? _____

E-4. If the research has limited application, is there a statement covering who or what it represents and the times or conditions under which it applies? _____

QUALITY CHECKPOINTS:

E-5. If the information comes from sources that are easy to contact or specially interested in the subject, is it noted that this information may not be typical of other parts of the population? _____

E-6. Does the report comment on the presence or absence of any exceptional events that might be reflected in the reported data, noting, for example, any audience and circulation drives, brand deals, publicity and promotion, and other transient factors that could affect the results? _____

F. MEANING - Interpretations and Conclusions

The value of research depends directly on what, if anything, has to be assumed to use the research for its intended purpose. If the assumptions are not made clear, or if they are open to serious question, the research is, at best, of uncertain value.

All interpretations of the research should be forthright, and consistent with the factual findings. Small differences should not be exaggerated and large differences should not be ignored or disparaged.

For research put to public use, what is important is whether it is appropriate, in concept and execution, to the purpose to which it is being applied. Research should not be judged by its labels, its stated intention, by the reputation of the sponsor or the research organization, or by its conformity to common research practices. Rather, it should be judged by the nature and quality of the actual measurements, and the relevance of those measures to the conclusions the data are being used to support.

Two particularly complex issues in the interpretation of research findings are the determination of causation and the prediction of future behavior. In general, people have a limited understanding and ability to report on their own motivations or explain their actions. The reasons behind the differences and the correlations found in study data are always more complex than they seem on the surface. Statistical relationships, in themselves, do not prove cause and effect. The careful identification and study of a broad spectrum of known variables, and systematic tracking of changes over time add confidence, but not absolute certainty, to the analysis.

Analyzing and generalizing the meaning of tests and experimental approaches is similarly, a complex business. All tests are, in some degree, artificial. The nature and the intensity of the stimulus, its method of application, the timing and character of the measurement of response and the representativeness of the test sample are all potential issues that need serious consideration in generalizing beyond the specific set of observations.

KEY QUESTIONS:

F-1. Are the measurements described in simple and direct language? _____

F-2. Does it make logical sense to use such measurements for the purpose to which they are being put? _____

F-3. Are the actual findings clearly differentiated from the interpretation of the findings? _____

F-4. Has rigorous objectivity and sound judgment been exercised in interpreting research findings as evidence of causation or as predictive of future behavior? _____

QUALITY CHECKPOINTS:

F-5. Is there an effort to make explicit any important assumptions that must be made in drawing conclusions from the research? _____

F-6. Does the report treat realistically people's ability to give valid or unbiased or quantitative responses? _____

F-7. Does the report specifically qualify any data that depend on the respondents' memories over time or their ability to predict future behavior? _____

F-8. Are the effects of the data-gathering instruments and methods made clear? _____

G. CANDOR - Open Reporting and Disclosure

Research should be presented for what it is, stating clearly how it was done, what it measured and the findings it produced.

The presentation should be direct, simple, and free of exaggerations, distortions and unsupported conclusions. Implications, inferences and speculative findings should be identified as such and not intermingled with either the hard data or the conclusions derived directly from the data.

Release of research findings should be accompanied by a description of the procedures in enough detail that a good researcher could redo the study without further information.

All of the gathered information should be available for inspection. Suppression of information unfavorable to the sponsor, or embarrassing to the responsible researcher, destroys the credibility of reported findings.

KEY QUESTIONS:

G-1. Is there a full and forthright disclosure of how the research was done? _____

G-2. Have all of the relevant findings been released, including any information potentially unfavorable to the sponsor or embarrassing to the responsible researcher? _____

G-3. Has the research been fairly presented? _____

QUALITY CHECKPOINTS:

G-4. Are all definitions, classification rules, coding procedures, weights and terminology explained in clear and unambiguous language? _____

G-5. Are the records of the research preserved, and with proper safeguard to the privacy of respondents, are they available to answer responsible inquiries about the collected data? _____

G-6. Is the presentation free of bias, exaggeration and graphic or other distortions? _____

G-7 Is there a statement on the limitations of the research and possible misinterpretations of the findings? _____